

Amendments to the Specification

Please delete paragraph number [04] and insert in its place the following replacement paragraph number [04], which is marked to show all changes relative to the original paragraph.

[04] As many enterprises (government organizations, companies, etc) grew beyond what can be housed in a single building, the need to share services and information freely between multiple ~~between multiple~~ sites evolved accordingly. These sites may be distributed over many sites either in a city, in a country, or internationally. Thus, the need to connect the site LANs, or LAN segments shared by the same user resulted in the development of the emulated LAN (ELAN) technologies. While the LAN segments of an emulated LAN generally use the same communication protocol, which may use a different communication protocol. A service provider must operate the emulated LANs for a certain customer seamlessly, as if they were one customer network (a virtual LAN.

Please delete paragraph number [06] and insert in its place the following replacement paragraph number [06], which is marked to show all changes relative to the original paragraph.

[06] Most service provider communications networks operate in accordance with the IP protocol because of the wide utilization of the IP protocol in customer LANs. However, service provider networks may use various technologies such as SONET, ATM, Frame Relay, IP and interfaces that are provided to the respective LANs. Virtual LAN (VLAN) technologies extend the IEEE 802 standard specification to address customer traffic differentiation in a MAN/WAN environment to provide free exchange of information between LAN segments at different customer sites within a protected emulated LAN

context. Providing VLAN support is the most complex and challenging of all Ethernet based services.

Please delete paragraph number [08] and insert in its place the following replacement paragraph number [08], which is marked to show all changes relative to the original paragraph.

[08] Solutions providing central management of the limited VLAN ID space have been proposed and implemented, however these are not satisfactory as the entity providing the central VLAN ID space management does not necessarily have ~~has~~ a direct relationship with each customer. Today, emulated LAN services have to be manually provisioned which is time consuming, error prone, and requires coordination of efforts involving multiple entities to ensure the VLAN IDs are unique throughout.

Please delete paragraph number [13] and insert in its place the following replacement paragraph number [13], which is marked to show all changes relative to the original paragraph.

[13] Existing solutions only allow emulated LAN services to be offered in a hose model, whereby the provider polices the ingress bandwidth of a customer UNI to an emulated LAN service. Since all that is known is the amount of bandwidth a site can send ~~sent~~ to the emulated LAN, this model does not allow a provider to provision the network for this service.

Please delete paragraph number [32] and insert in its place the following replacement paragraph number [32], which is marked to show all changes relative to the original paragraph.

[32] For a large number of sites that need to be interconnected, grouping the CE sites into different subnets (emulated LAN) allows ~~allow~~ the VLAN to be scaled, while still reducing provisioning and link states within one subnet. In particular, the invention described herein is directed to a method of enabling a CE (customer equipment) with a Frame Relay or ATM access (or other L-2 protocol) to be connected over a point-to-point link. Such a CE appears as a node on a VPLS/emulated LAN, thereby allowing it to communicate with other CEs as if it is connected to the same LAN as the other CEs.